

**DURHAM  
16236**

November 9, 2018

**SPECIAL PROVISION**

**AMENDMENT TO SECTION 628 -- SAWED PAVEMENT**

**Item 628.5 – Diamond Grinding Concrete Pavement**

**Add** to Description:

**1.3** This work shall consist of diamond grinding the top surface of a portland cement concrete bridge deck or approach slab, at the locations indicated on the Contract Plans.

**Amend** 3.2 to read:

**3.2** The equipment used to diamond grind the top surface of concrete bridge deck or approach slab shall be a self-propelled machine specifically designed to smooth and texture portland cement concrete, equipped with diamond tipped saw blades.

**3.2.1** All equipment used to diamond grind shall be subject to the approval of the Engineer, prior to the start of work.

**Add** to Construction Requirements:

**3.5** The concrete structural slab shall be diamond ground after it has reached an age of 14 days or a minimum compressive strength of 3500 psi.

**3.6** Grinding shall be longitudinal, and shall begin and end at lines normal to the pavement centerline in any ground section. The diamond ground surface shall be uniform in appearance with a longitudinal corduroy type texture. The grooves shall be between 0.10 and 0.15 inches wide. The land area between the grooves shall be between 0.065 and 0.125 inches. The peak of the ridges shall be approximately 1/16 inch higher than the bottom of the grooves.

**3.6.1** On curved decks, each pass of the diamond grinding machine shall begin on the side of the deck having the smaller radius.

**3.6.2** The cutting of grooves over an area already grooved will not be permitted. No cutting blade shall be introduced into an already established groove.

**3.6.3** During the diamond grinding operations, the Engineer will verify, at random, that the desired groove depth is being achieved. If it is determined that the desired groove depth is not

being achieved, the Design-Build Team shall stop the grooving operations and make the necessary adjustments.

**3.6.3.1** The Design-Build Team shall supply the Engineer with two accurate easily readable, gages with which to verify the groove depth. The gauges shall be made available to the Engineer one week prior to the anticipated start of the grooving operation. Gauges shall be accompanied by manufacturer's instructions for their use, if deemed necessary.

**3.6.4** Grooves shall terminate  $12" \pm 1"$  from the curb line or drainage structure.

**3.6.5** Grooving operations which are performed in the area of mechanical joints shall not be sawn any closer than 2" nor further than 3" from the edge of joint.

**3.7** Slurry, or debris, from the diamond grinding operation shall be continuously removed. The slurry, or debris, shall be disposed of properly by the Design-Build Team.